

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-071254

(43)Date of publication of application : 11.03.2003

(51)Int.Cl.

B01D 65/02

B01D 65/06

(21)Application number : 2001-265481

(71)Applicant : SUMITOMO HEAVY IND LTD

(22)Date of filing : 03.09.2001

(72)Inventor : OKATA MASANOBU

## (54) BACKWARD WASHING METHOD FOR SEPARATION MEMBRANE

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a backward washing method for a separation membrane capable of outstandingly enhancing a washing efficiency at the time of backward washing a separation membrane of a fluid to be treated as compared with the conventional method.

**SOLUTION:** In a membrane separation device 10, a membrane module 20 in which a plurality of hollow thread film elements 2 are longitudinally provided in parallel is provided in a box body 1. A pump 5 for feeding a washing liquid M is connected to the box body 1 and a vacuum pump 4 for discharging a backward washing liquid Mm from the box body 1 is connected thereto through a pipe having a vacuum tank 6. At the time of backward washing, after the washing liquid M is fed to an external space S2 of the hollow thread film elements 2, a space part S6 of the vacuum tank 6 the pressure of which is previously reduced is communicated with an internal space S1. Thereby, the boiling state of the washing liquid M is generated at a membrane surface part butted to the internal space S1 and deposited substance as a residue removed by filtration is peeled off and removed by an explosion force.

